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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,994	12/07/2000	Yasumasa Kodama	450100-02879	1585

20999 7590 03/22/2005

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NEW YORK, NY 10151

EXAMINER

BOCCIO, VINCENT F

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,994

Applicant(s) ^U

KODAMA, YASUMASA

Examiner

Vincent F. Boccio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/27/05</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al. (US 5,278,838) in view of Baba et al. (US 5,758,057).

Regarding claim 1, Ng discloses and meets the limitations associated with a system and method, the apparatus comprising:

- recording and reproducing means (col. 5, lines 54-, "monitoring for failed access, read operation or write operation", therefore, recording and reproducing operations), data to and from a non-linear record medium (see DISK) having a plurality of input and output processing means (Fig. 1), connected to the recording and reproducing means through a predetermined transmission line (Fig. 1, interface between controllers 10-11 and disk storage sections 13, 14, 15, interface, col. 3, "controller 11 by a usual controller to peripheral device connection 17"), for processing the data, inputted from the outside (source), to output processed data (on line operation), to and from the recording and reproducing means in,

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- a division manner, wherein the apparatus comprises means for dividing (col. 3, raid 3, 4, 5, and col. 8, "striped mode array", which requires dividing the inputted data into stripes, therefore, the data structure stripes, by dividing input into stripes);
- generating error correction code/codes (col. 3, lines 39-, "parity computed and stored in disk drive P 24"), of the data and which transfers the error correction code to at least one of the recording and reproducing means (parity drive for example) and output processing means for correcting erroneous data by using the error correction code/codes (parity drive), and outputs from the R/R means, when an error is detected (upon a read error, the system uses the parity to correct if possible "parity correction successful", some times will not correct), when corrected will be used to maintain day to day operations or on-line operations, col. 5, also see col. 10, "corrected error occurred", etc.....

Ng is deemed to read on the claim as recited, but, fails to disclose wherein the data containing video and/or audio data in the system, further it is deemed that data in error correction can be, corrected based on parity, but, Ng is directed to rebuilding operations and fails to clearly mention upon an error using the parity to maintain online operations, although is deemed to suggest this particular well known feature.

Baba teaches in combination of Fig. 25 and col. 19, etc..., wherein the raid system stored striped video (therefore, time video is divided or time division de-multiplexed, thereafter upon reproduction from the system, is time division multiplexed), also teaching upon an error recovering the data, col. 19, error data, such as multimedia, video, recovered using the parity data, col. 19, as taught by Baba.

The examiner takes official notice that as suggested by Baba {multimedia data}, suggests audio as one obvious form of multimedia data, known to be in a raid system associated with video, as is conventional, for such as, video on demand/near systems, also having audio as part of the multimedia video presentations.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Ng by

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incorporating wherein the data, can be multimedia, video and audio material and upon an error to recover the data in error using the parity, drive or data, thereby maintaining online operations, as taught by Baba and Ng, as is obvious to those skilled in the art.

Regarding claim 2, the combination as applied provides for restoring the multimedia data or error correcting code (based on data errors for the video and/or audio data or providing new parity or replacing the parity drive based on the other drives data, as disclosed and conventional), which in accord to Ng, performs rebuilding at available times (rebuilding interleaved with current data accessing, or when is possible, while maintaining online operations or while on-line -vs- off line, abstract etc.....), wherein a trouble in which the data (audio and/or video), or error correcting code (parity data/drive), cannot be recorded on the recording reproducing means, met by recording to a new drive and replace a drive in error or to remove the recording areas of the drive having the failed area/areas to either a different track or zone (col. 2, lines 27-40, etc.....).

Claims 6-7 are deemed analyzed and discussed with respect to the claims above.

Regarding claims 3-5 and 8-10, the combination as applied fails to disclose wherein the transmission time is Ethernet, fibre Channel or IEEE 1394.

The examiner takes official notice that all three types of interfaces between devices as claimed, Ethernet, fibre {FIBER OPTIC} and 1394, are all deemed well known interfaces, being available and viable and therefore, it would have been obvious to those skilled in the art at the time of the invention, to utilize any one of the Ethernet, 1394 or fibre, as the recited transmission line, as claimed, in view of being known and viable standards considered to be an obvious optional to choose from and utilize, as is obvious to those skilled in the art.

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Contact Fax Information

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:


(703) 872-9306, (for formal communication
intended for entry)

Hand-delivered responses should be brought to Crystal
Park II, 2121 Crystal Drive, Arlington, VA., Sixth
Floor (Receptionist).

Contact Information

Any inquiry concerning this communication or earlier
communications should be directed to the examiner of
record, Monday-Thursday, 8:00 AM to 5:00 PM Vincent F.
Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent
3/16/05


VINCENT BOCCIO
PRIMARY EXAMINER